UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/437,580	11/09/1999	ALEXANDER G. MACINNIS	36101/SAH/B6	8182

23363 7590 11/20/2002

CHRISTIE, PARKER & HALE, LLP
350 WEST COLORADO BOULEVARD
SUITE 500
PASADENA, CA 91105

EXAMINER	
NGUYEN, KEVIN M	
ART UNIT	**PAPER NUMBER**
2674	

DATE MAILED: 11/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/437,580	Applicant(s) MACINNIS ET AL.	
	Examiner Kevin M. Nguyen	Art Unit 2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 September 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☒ The proposed drawing correction filed on *20 September 2002* is: a)☒ approved b)☐ disapproved by the Examine

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *14, 15* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Request for Continued Examination

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/21/2002 has been entered. An action on the RCE follows:

2. The information disclosure statement filed 9/20/2002 and 10/21/2002 that has been placed in the application file, the information referred to therein have been considered as to the merits.

3. The corrected or substitute drawings were received on 9/20/2002. These drawings are approved.

4. The indicated allowability of claims 1-20 are withdrawn in view of the newly discovered reference(s) to Saeger et al (IDS). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tateyama (US 5,515,077) in view of Saeger et al (US 5,467,144).

As to claim 1, Tateyama teaches the method of horizontally scrolling a display window to the left comprising the steps of blanking out four bit color data (10, 10) (see Fig. 24 D) in one horizontal display period (Fig. 24 A, col. 8, lines 3-24), image is scrolled by one dots to the left (horizontal scroll +1) (Fig. 24E, col. 8, lines 50-52), a picture is displayed on the screen in plurality color mode for each "nH" (n rasters) (see Fig. 28, col. 8, lines 25-26). Tateyama et al fail to teach a read pointer. However, Saeger et al teach the position of the PIP overlay on the screen will be determined by the starting address of the read pointer of the video RAM at the start of the scanning for each field of the main signal (figure 18, col. 16, lines 7-10). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the read pointer taught by Saeger et al in Tateyama et al's image because this would map or determine the positions of the pictures (col. 1, lines 11-12 of Saeger et al).

As to claims 2 and 4, Tateyama teaches the image is scrolled by two dots to the left (horizontal scroll +2), and a color vector (Y2 Y3 U1 V1,... Yn-2 Yn-1 Um Vm, Z) is read, where m=(n-1)/2 (see col. 7, lines 38-41).

As to claim 3, Tateyama teaches blanking out four-bit color data (10, 10) (see Fig. 24 D).

As to claim 5, Tateyama teaches the image is scrolled by two dots (pixel) to the left (horizontal scroll +2), and a color vector (Y2 Y3 U1 V1,... Yn-2 Yn-1 Um Vm, Z) is

read, where m=(n-1)/2 (see col. 7, lines 38-41), blanking out four bit color data (10, 10) (see Fig. 24 D).

As to claim 6, Tateyama teaches the pallet codes are defined by data of 4, 5, 6, and bits for the 16, 32, and 64, 128 color modes (see col. 1, lines 25-28).

As to claim 7, Tateyama teaches the method of horizontally scrolling a display window to the right comprising the steps of blanking out four bit color data (10, 10) (see Fig. 25 D) in one horizontal display period (Fig. 25 A, col. 8, lines 3-24), image is scrolled by one dots to the right (horizontal scroll -1) (Fig. 25E, col. 8, lines 50-52), a picture is displayed on the screen in plurality color mode for each "nH" (n rasters) (see Fig. 28, col. 8, lines 25-26). Tateyama et al fail to teach a read pointer. However, Saeger et al teach the position of the PIP overlay on the screen will be determined by the starting address of the read pointer of the video RAM at the start of the scanning for each field of the main signal (figure 18, col. 16, lines 7-10). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the read pointer taught by Saeger et al in Tateyama et al's image because this would map or determine the positions of the pictures (col. 1, lines 11-12 of Saeger et al).

As to claims 8 and 10, Tateyama teaches the image is scrolled by two dots to the right (horizontal scroll -2), and a color vector (Y2 Y3 U1 V1,... Yn-2 Yn-1 Um Vm, Z) is read, where m=(n-1)/2 (see col. 7, lines 38-41).

As to claim 9, Tateyama teaches blanking out four-bit color data (10, 10) (see Fig. 24 D).

As to claim 11, Tateyama teaches the image is scrolled by two dots (pixel) to the right (horizontal scroll -2), and a color vector (Y2 Y3 U1 V1,... Yn-2 Yn-1 Um Vm, Z) is read, where m=(n-1)/2 (see col. 7, lines 38-41), blanking out four bit color data (10, 10) (see Fig. 24 D).

As to claim 12, Tateyama teaches the pallet codes are defined by data of 4, 5, 6, and bits for the 16, 32, and 64, 128 color modes (see col. 1, lines 25-28).

As to claim 13, Tateyama teaches the graphic display system which includes the a game-software recording medium CD-ROM 100 (raw graphic data), control unit 104 (a display engine) for mainly controlling transmission of image data (see Fig. 9, col. 4, lines 29-33), the control unit 104 has direct memory access (DMA) are supplied through an SCSI interface form CD-ROM 100. Data supplied to the SCSI controller are buffered in the K-RAM (see Fig. 30, col. 9, lines 53-57), blanking out four bit color data (10, 10) (see Fig. 24 D). Tateyama et al fail to teach a read pointer. However, Saeger et al teach the position of the PIP overlay on the screen will be determined by the starting address of the read pointer of the video RAM at the start of the scanning for each field of the main signal (figure 18, col. 16, lines 7-10). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the read pointer taught by Saeger et al in Tateyama et al's image because this would map or determine the positions of the pictures (col. 1, lines 11-12 of Saeger et al).

As to claims 14-17, Tateyama teaches the format for compressed image data in the memory, pallet colors in 16, 32, 64 and 128 color modes are employed to display images. Image data are transmitted for 16 rasters (lines) through a data bus of 8 bits.

According to the system, plural color modes may be used for one screen; however, 16 raster data are displayed in a single color mode. In FIG. 31, "A" specifies the type of image data. In the area "A", each of "FFH" and "F8H" represents IDCT compressed data for a natural picture. On the other hand, each of "F3H,"F2H," F1H" and "F0H" represents image data with a color pallet for an animation picture. "F3H," F2H," F1H" and "F0H" represent run-length compressed data of 128, 64, 32 and 16 colors, respectively. "B," C" and "D" represent the first and last halves of bytes of a compressed data region and data for two byte boundary of compressed data, respectively (see col. 10, lines 18-34).

As to claims 18-20, Saeger et al teach the position of the PIP overlay on the screen will be determined by the starting address of the read pointer of the video RAM at the start of the scanning for each field of the main signal (figure 18, col. 16, lines 7-10).

7. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tateyama (US 5,515,077) in view of Sokawa et al (US 6,353,460).

As to claims 1-20, Tateyama teaches the method of horizontally scrolling a display window to the left comprising the steps of blanking out four bit color data (10, 10) (see Fig. 24 D) in one horizontal display period (Fig. 24 A, col. 8, lines 3-24), image is scrolled by one dots to the left (horizontal scroll +1) (Fig. 24E, col. 8, lines 50-52), a picture is displayed on the screen in plurality color mode for each "nH" (n rasters) (see Fig. 28, col. 8, lines 25-26). Tateyama et al fail to teach a read pointer. However, Sokawa et al teach a read pointer P_R pointing to the head address of the first input

buffer portion, starting the read of the input image data from the first input buffer portion (figure 12, col. 22, lines 28-31). Since the plurality of output ports are provided with the plurality of read pointers and the relationships between the pointers can be programmably set, a variety of memory functions can be realized (col. 24, lines 7-10). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the read pointer taught by Sokawa et al in Tateyama's image because this would perform efficient high level image processing while providing an video signal processing device with a reduced cost (col. 9, lines 18-20 of Sokawa et al).

8. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tateyama (US 5,515,077) in view of Numata (US 5,907635).

As to claims 1-20, Tateyama teaches the method of horizontally scrolling a display window to the left comprising the steps of blanking out four bit color data (10, 10) (see Fig. 24 D) in one horizontal display period (Fig. 24 A, col. 8, lines 3-24), image is scrolled by one dots to the left (horizontal scroll +1) (Fig. 24E, col. 8, lines 50-52), a picture is displayed on the screen in plurality color mode for each "nH" (n rasters) (see Fig. 28, col. 8, lines 25-26). Tateyama et al fail to teach a read pointer. However, Numata teaches the address pointer (read pointer) is shifted on bit leftwardly (figure 9, col. 6, lines 40-41). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the read pointer taught by Numata in Tateyama's image because this would provide quantization and variable length coding of a picture data at a high speed (col. 1, lines 11-12 of Numata).

9. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tateyama (US 5,515,077) in view of Allen et al (US 5,982,425).

As to claims 1-20, Tateyama teaches the method of horizontally scrolling a display window to the left comprising the steps of blanking out four bit color data (10, 10) (see Fig. 24 D) in one horizontal display period (Fig. 24 A, col. 8, lines 3-24), image is scrolled by one dots to the left (horizontal scroll +1) (Fig. 24E, col. 8, lines 50-52), a picture is displayed on the screen in plurality color mode for each "nH" (n rasters) (see Fig. 28, col. 8, lines 25-26). Tateyama et al fail to teach a read pointer. However, Allen et al teach read pointers 405, 410 and 415 using to incrementally drain the three planes of the video buffer 100 (figure 4, col. 6, lines 31-32). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the read pointer taught by Allen et al in Tateyama's image because the sequence counter is configured to detect when a final location of the sequence of memory location has been addressed (col. 2, lines 56-58 of Allen et al).

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Kevin M. Nguyen** whose telephone number is **703-305-6209**. The examiner can normally be reached on MON-FRI from 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard A Hjerpe** can be reached on **703-305-4709**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Kevin M. Nguyen
Examiner
Art Unit 2674

RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600